

**BELLSOUTH**

**Ben G. Almond**  
Executive Director-  
Federal Regulatory

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December 16, 1996

**RECEIVED**

**DEC 16 1996**

**Mr. William F. Caton**  
**Secretary**  
**Federal Communications Commission**  
**1919 M Street NW, Room 222**  
**Washington, DC 20554**

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Federal Communications Commission  
Office of Secretary

**Re: BellSouth Notice of In-Progress Network Changes**  
**CC Docket No. 96-98, Section 51.329(a)**

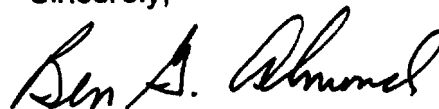
**Dear Mr. Caton:**

BellSouth Telecommunications, Inc. ("BellSouth") hereby submits the attached original and two copies of its Notice of In-Progress Network Changes in accordance with the requirements set forth in paragraphs 234 and 402 of the Commission's Second Report and Order and Memorandum Opinion and Order in CC Docket No. 96-98.

As required, one paper copy and one diskette copy is being submitted to the Chief of the Common Carrier Bureau's Network Services Division.

Should you have any questions regarding this submission, please contact me at (202) 463-4112.

Sincerely,



**Ben Almond**  
**Executive Director**  
**Federal Regulatory**

**Attachments**

**cc: Geraldine Matise (paper and diskette)**  
**Bill Howden (paper)**  
**Herb Newman (paper)**  
**Ginny Kennedy (paper)**

No. of Copies rec'd  
List ABCDE

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**NOTICE OF NETWORK CHANGE****12/18/96****BellSouth Telecommunications, Inc. 675 W. Peachtree Street NE, Atlanta, GA. 30375****BELLSOUTH TO OFFER UNBUNDLED LOOPS AND PORTS**

BellSouth will make unbundled loops available to Alternate Local Exchange Carriers (ALEC's), between an end-user's Serving Wire Center and an end-user's Network Interface (NI). At the Serving Wire Center, these loops can be connected to either collocated equipment or other unbundled elements.

Analog-capable loops can be provided on either a 2-wire or 4-wire basis. The following industry-standard signaling arrangements will be supported:

Number of Wires	Signaling Arrangements
2	Ground-start signaling - ALEC provides battery feed
2	Ground-start signaling - NI provides battery feed
2	Loop-start signaling - ALEC provides battery feed
2	Loop-start signaling - NI provides battery feed
2	Transmission Only - No Signaling
2	Reverse-Battery - ALEC Originating
2	Reverse-Battery - ALEC Terminating
4	Duplex Signaling
4	Ground-start signaling - ALEC provides battery feed
4	Ground-start signaling - NI provides battery feed
4	Loop-start signaling ALEC provides battery feed
4	Loop-start signaling - NI provides battery feed
4	Transmission Only - No Signaling

Digital-capable loops can be provided to support the following standard transmission methodologies:

Digital Baseband at 64 kb/s  
Basic Rate Access ISDN  
DS1  
DS3

Additionally, loops will be made available that should support High bit-rate Digital Subscriber Line (HDSL) transmission as described in T1 Technical Report 28 on HDSL.

Unbundled port connections — to end-office switches — will also be made available. Line-side ports, with either loop-start or ground-start signaling, will be available. Trunk-side ports will be made available as well.

BellSouth Telecommunications plans to begin offering these unbundled elements in the first quarter of 1997.

**To order a copy of the above-referenced Technical Report, please contact:**

**Alliance for Telecommunications Industry Solutions  
1200 G Street, N.W.  
Washington, DC 20005  
(202) 434 8845**

**For further information regarding unbundled loops, please contact:**

**Jerry Latham  
Product Manager  
Room E511  
3535 Colonnade Parkway  
Birmingham, AL 35243  
(205) 977-1070**

**For further information regarding unbundled ports, please contact:**

**Sherry Deloach  
Product Manager  
35S80 BellSouth Center  
675 W. Peachtree Street NE  
Atlanta, GA 30375  
(404) 529-6460**

**NOTICE OF NETWORK CHANGE**

**12/16/96**

**BellSouth Telecommunications, Inc. 675 W. Peachtree Street NE, Atlanta, GA. 30376**

**BELLSOUTH TO MODIFY ITS FRAME RELAY SERVICE**

Frame Relay Service is a data communications service that routes variable length data packets over permanent virtual connections (PVCs) which are defined at service subscription. BellSouth is planning to offer Frame Relay Service over Asynchronous Transfer Mode (ATM).

Access to this arrangement will be via 4-wire DS1 and DS3 digital circuits and SONET OC-3 optical interfaces. BellSouth plans to offer this service with general deployment throughout the region beginning in the second quarter of 1997 where appropriate facilities are available.

Network interface specifications are based on the following document:

Frame Relay Forum document FRF.5, *Frame Relay / ATM Network Interworking Implementation Agreement*, December 20, 1994.

To order a copy of the above-referenced Technical Report, please contact:

Frame Relay Forum  
303 Vintage Park Drive  
Foster City, CA 94404  
(415) 578-6980

For additional information regarding geographic availability, pricing, or additional technical information, please contact:

Bob Fulghum  
BellSouth Telecommunications, Inc.  
Suite 500  
3000 Riverchase Galleria  
Hoover, AL 35244  
(205) 444-0512

**NOTICE OF NETWORK CHANGE****12/18/96****BellSouth Telecommunications, Inc. 675 W. Peachtree Street NE, Atlanta, GA. 30375****BELLSOUTH TO MODIFY IEEE 802.3/ETHERNET INTERCONNECTION SERVICE**

BellSouth is planning to modify it's IEEE 802.3/Ethernet Interconnection Service. This service is a part of BellSouth's Native Mode LAN Interconnection Service (NMLI), which allows the interconnection of customer LANs using native speed interfaces.

The network interface to this service is being modified to support IEEE standard 100BASE-T link parameters in addition to the interfaces originally disclosed for the service in October, 1992. The physical interface to the modified service will be a multimode fiber medium, and will conform to IEEE standard 100BASE-FX parameters. This interface will terminate in an optical medium connector plug and socket (ST connector). These interfaces are specified in detail by IEEE Standard 802.3u-1995.

BellSouth plans to offer this new IEEE 100BASE-T interface to NMLI customers in the Frankfort, Kentucky metropolitan area during the first quarter of 1997. Additional deployments will be offered as demand warrants.

To order a copy of the above-referenced Technical Report, please contact:

Copies of IEEE Std. 802.3u-1995, Media Access Control (MAC) Parameters, Physical Layer, Medium Attachment Units, and Repeater for 100Mb/s Operation, Type 100BASE-T, can be ordered from:

American National Standards Institute  
11 West 42nd Street  
New York, NY 10036  
(212) 642-4900

For additional information regarding geographic availability, pricing, or additional technical information, please contact:

Mike Gafford  
Life Cycle Manager - Fast Packet Services  
BellSouth Business Systems  
Suite 500, 3000 Riverchase Galleria  
Hoover, Alabama 35244  
(205) 444-0520

**NOTICE OF NETWORK CHANGE 12/18/96**

**BellSouth Telecommunications, Inc. 675 W. Peachtree Street NE, Atlanta, GA. 30375**

**BELLSOUTH TO MODIFY ESCON™ CHANNEL EXTENSION SERVICE**

BellSouth is planning to modify its ESCON Channel Extension Service. IBM's Enterprise System Connection (ESCON) I/O interface provides a bi-directional optical fiber based interconnection between host channels or host channels and control units.

The network interface to this service is being modified to support standard ESCON singlemode fiber link parameters as well as the existing support of standard ESCON multimode fiber link parameters. These interfaces are specified by IBM document SA23-0394-02, Enterprise System Architecture/390™, ESCON I/O Interface - Physical Layer, January 1992. These interfaces will support the transport of ESCON messages as defined by IBM document SA22-7202-02, Enterprise System Architecture/390, ESCON I/O Interface, August 1992.

BellSouth plans to offer this new interface to its ESCON Channel Extension Service in the Jacksonville, Florida metropolitan area during the second quarter of 1997. Additional deployments will be offered as demand warrants.

To order a copy of the above-referenced Technical Reports, please contact:

IBM SA22-7202-02, Enterprise System Architecture/390, ESCON I/O Interface;  
August 1992, Price \$17.75

IBM SA23-0394-02, Enterprise System Architecture/390, ESCON I/O Interface,  
Physical Layer; January 1992, Price \$13.75

IBM documentation can be ordered through a local IBM representative, or via:

IBM Corporation  
336 Heinz St.  
Mechanicsburg, Pa. 17055

For additional information regarding geographic availability, pricing, or additional technical information, please contact:

Ted Zernheldt  
Manager - LAN Interconnection Services  
BellSouth Advanced Networking Division  
Suite 500, 3000 Riverchase Galleria  
Hoover, AL 35244  
(205) 444-0511

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Enterprise Systems Architecture/390 and Enterprise Systems Connection (ESCON) are trademarks of the IBM Corporation.